

Notice of Allowability	Application No.	Applicant(s)	
	10/507,183	FISH, DAVID ANDREW	
	Examiner	Art Unit	
	Tom V. Sheng	2629	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to amendments filed on 9/18/06 and 6/27/06.
2. ☒ The allowed claim(s) is/are 1-6 and 8-11.
3. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☒ All b) ☐ Some* c) ☐ None of the:
 1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
 5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

- | | |
|---|--|
| <ol style="list-style-type: none"> 1. <input type="checkbox"/> Notice of References Cited (PTO-892) 2. <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) 3. <input type="checkbox"/> Information Disclosure Statements (PTO/SB/08),
Paper No./Mail Date _____ 4. <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit
of Biological Material | <ol style="list-style-type: none"> 5. <input type="checkbox"/> Notice of Informal Patent Application 6. <input type="checkbox"/> Interview Summary (PTO-413),
Paper No./Mail Date _____ 7. <input type="checkbox"/> Examiner's Amendment/Comment 8. <input checked="" type="checkbox"/> Examiner's Statement of Reasons for Allowance 9. <input type="checkbox"/> Other _____ |
|---|--|

DETAILED ACTION

Allowable Subject Matter

1. Claims 1-6 and 8-11 are allowed.
2. The following is an examiner's statement of reasons for allowance:

The invention is directed to an active matrix electroluminescent (EL) display device has a switching circuit for each display pixel, which has a drive transistor and a cascode transistor in series with the associated EL display element. The switching circuit is operable in two modes, a first mode in which an input current is sampled by the drive transistor and a second mode in which the drive transistor drives a current corresponding to the input current through the EL display element. This configuration uses the same transistor for current sampling as for current driving, thereby avoiding the need for matched transistors. The cascode transistor increases the output impedance and ensures that no voltage fluctuations pass to the drive transistor, so that a constant current supply is maintained.

Independent claim 1 identifies, inter alia, the uniquely distinct features, "a drive transistor and a cascode transistor in series with an associated EL display element, the drive transistor being for driving a current through the associated EL display element and the cascode transistor being connected between the drive transistor and the associated EL display element", "a storage capacitor connected between a power supply line to which the source of the drive transistor is also directly connected and the gate of the drive transistor, for storing a gate voltage for the drive transistor", and "a first

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switch for allowing or preventing the drive current to flow through the EL display element, wherein the first switch is connected between the cascode transistor and the associated display element.”

Nishitoba (US 6,734,836 B2) teaches an active matrix EL display device. Each pixel comprises an EL device, a storage capacitor, a driving transistor and a switch transistor. When signal line is high, a signal current from signal line is stored as a signal voltage at the storage capacitor as the switch transistor is turned off. When signal line is low, a current is supplied to the EL device based on the stored signal voltage as the switch transistor is turned on. However, Nishitoba does not teach a cascode transistor in series with the drive transistor, the switch transistor and the EL device. Further, the connections among the EL device, driving transistor, switch transistor and storage capacitor of Nishitoba is very different from those of the Applicant.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled “Comments on Statement of Reasons for Allowance.”

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tom V. Sheng whose telephone number is (571) 272-7684. The examiner can normally be reached on 9:00am - 6:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Amr Awad can be reached on (571) 272-7764. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Tom Sheng
September 28, 2006

AMR A. AWAD
SUPERVISORY PATENT EXAMINER

A handwritten signature in black ink, appearing to read "Amir Ahmad Alwan", with a large, sweeping flourish at the end.